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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,802	01/09/2007	Karim Essemiani	5959-001	4902

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EXAMINER	
HRUSKOCI, PETER A	

ART UNIT	PAPER NUMBER
1797	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,802	ESSEMIANI ET AL.	
	Examiner	Art Unit	
	/Peter A. Hruskoci/	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 June 2006 and 09 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *63-111* is/are pending in the application.

4a) Of the above claim(s) *89-106* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *63-66,68-87 and 107-111* is/are rejected.

7)☒ Claim(s) *67 and 88* is/are objected to.

8)☒ Claim(s) *63-111* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/22/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 63-88 and 107-111 drawn to a method.

Group II, claims 89-106, drawn to a system.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, a special technical feature which these claims share does not define a contribution over the prior art. For example, the claims of Groups I and II share a flow channel as the special technical feature, which is considered to lack novelty or an inventive step in view of Nyman et al. 7,083,050 (see col. 4 line 51 through col. 5 line 58)

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

During a telephone conversation with Larry L. Coats on 8/5/09 a provisional election was made without traverse to prosecute the invention of Group I, claims 63-88 and 107-111. Affirmation of this election must be made by applicant in replying to this Office action. Claims 89-106 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claims 107-111 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 107 "treating" is vague and indefinite because it is unclear how this term further limits the claim. Claim 107 is considered incomplete because it is essential that the instant method include the addition of a flocculating reagent to form a flocculated mixture including flocs, and a separator for separating clarified effluent from a sludge including flocs, in view of pages 4 and 5 of the instant specification. Claims 108-111 depend from claim 107.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 63, 65, 66, 68-80, 82, and 84-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nyman et al. 7,083,050 in view of Chatfield 3,779,910. Nyman et al. disclose (see col. 4 line 51 through col. 5 line 63, and Example 2) a method of treating water substantially as claimed. The claims differ from Nyman et al. by reciting that the water is directed into an open upper end of the flow channel. Chatfield disclose (see col. 2 line 7 through col. 3 line 19) that it is known in the art to utilize a flow channel having an open upper end to mix a coagulant with wastewater, and flocculate suspended solids in the mixture. It would have been obvious to one skilled in the art to modify the method of Nymam et al. by utilizing the recited open upper end in view of the teachings of Chatfield, to aid in separating flocculated solids from the water. The specific location of the flow channel in the reactor and flow rates utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific water treated and results desired absent a sufficient showing of unexpected results.

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nyman et al. 7,083,050 in view of Chatfield 3,779,910, and further in view of Bieker et al. 2,419,004. The claim differs from the references as applied above by reciting that the method includes continuously recirculating the flocculated mixture from the reactor downwardly through the immersed flow channel. Bieker et al. disclose (see col. 3 line 63 through col. 4 line 57) that it is known in the art to utilize a flow channel or liquid guide member 23 including a circulating propeller 47, to aid in circulating sludge from a clarification zone to a mixing zone for mixing water and chemicals. It would have been obvious to one skilled in the art to modify the

references as applied above, by recirculating the recited flocculated mixture in view of the teachings of Bieker et al, to aid in separating solids from the water.

Claims 81 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nyman et al. 7,083,050 in view of Chatfield 3,779,910, and further in view of Binot et al. 6,824,692. The claims differ from the references as applied above by reciting that the method includes mixing an insoluble granular material with the water. Binot et al. disclose (see col. 3 line 50 through col. 4 line 49) that it is known in the art to utilize insoluble granular material and a coagulant, to aid in clarifying water. It would have been obvious to one skilled in the art to modify the references as applied above, by mixing the insoluble granular material with the water in view of the teachings of Bieker et al, to aid in clarifying the water.

Claims 67 and 88 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 107-111 properly written to overcome the above 35 USC 112 rejection would be allowable.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Peter A. Hruskoci/ whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter A. Hruskoci/
Primary Examiner
Art Unit 1797

8/17/09